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10/757,505	01/15/2004	Caroline Delattre	016800-583	6320

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FERNANDEZ, SUSAN EMILY

ART UNIT	PAPER NUMBER
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1651

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/757,505	Applicant(s) DELATTRE ET AL.	
	Examiner Susan E. Fernandez	Art Unit 1651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13, 14, 16, 17, 21, 24, 25, 27-29 and 32-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13, 14, 16, 17, 21, 24, 25, 27-29 and 32-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

The amendment filed February 24, 2006, has been received and entered.

Claims 1-11, 13, 14, 16, 17, 21, 24, 25, 27-29, and 32-42 are pending.

Election/Restrictions

Applicant's election with traverse of alpha-hydroxy acid as the additional ingredient of species (a), xerosis as the disease of species (b), and aspartylglucosaminidase AGA as the compound of species (c), in the reply filed on February 24, 2006, is acknowledged. The traversal is on the ground(s) that the election of species normally presupposes that no generic claim is allowable and no art has been adduced which could militate against the allowance of a generic claim herein. This is not found persuasive because, as discussed below, no generic claim is allowed.

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-11, 13, 14, 16, 17, 21, 24, 25, 27-29, and 32-42 are examined on the merits to the extent they read on the elected subject matter and species.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 1-11, 13, 14, 16, 17, 21, 24, 25, 27-29, and 32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, the invention encompasses a regime/regimen comprising the topical application of any and all hydrolase polypeptides having amidase activity, or precursors thereof, and any and all activators of said hydrolase polypeptide. However, the specification only discusses the use and the prodesquamating effect of aspartylglucosaminidase (AGA) (page 28, paragraph [00137]), and the applicant has not indicated which of the numerous hydrolase polypeptides having amidase activity, or precursors thereof, have the required effects as recited in the preamble of the claims (regime/regimen for promoting desquamation of the skin and/or for promoting hydration of the skin, etc.). Thus there is only written description for aspartylglucosaminidase (AGA).

Similarly, the specification only indicates sodium dodecyl sulphate (SDS) as an activator of a hydrolase polypeptide having amidase activity, and does not describe any other compounds appropriate for activating the polypeptide.

Thus, a holding of lack of written description is clearly required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 3-6, 21, and 33-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is indefinite since the recitation “fragment of polypeptide (a), (b) or (c)” for (d) is unclear. It appears that the recitation is referring to a fragment of polypeptide (a), or a fragment of the enzymatic or biomimetic analogue of polypeptide (b), or a fragment of a fragment of polypeptide (a). Additionally, the recitation “modified polypeptide fragment (a), (b), or (c)” for (e) is confusing since it appears to be referring to modified polypeptide fragments as described in (a), (b), and (c), but only (c) refers to a fragment. Thus, claims 3-6 are rejected under 35 U.S.C. 112, second paragraph.

Claim 21 is rendered indefinite by the recitation “or mixture thereof” since it appears that the claim requires a composition comprising all the ingredients recited prior to “or mixture thereof,” and therefore, renders “or mixture thereof” redundant. Thus, claims 21 and 38 are rejected under 35 U.S.C. 112, second paragraph.

Claims 33-42 are rendered indefinite by the recitation “aspartylglucosaminidase AGA” since AGA is an abbreviation of “aspartylglucosaminidase” (see Arvio et al., J Med Genet, 1999, 36: 398-404, page 398, first paragraph). Therefore, the claims should be clarified to show that AGA is only an abbreviation of the term “aspartylglucosaminidase”.

Claim 34 is indefinite because it recites “said at least one hydrolase polypeptide having amidase activity” at line 2 which lacks antecedent basis since parent claim 32 does not recite “at least one hydrolase polypeptide...” and instead, recites “a hydrolase polypeptide...”

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7, 8, 16, 24, 25, 27-29, and 32 are rejected under 35 U.S.C. 102(a) and 35 U.S.C 102(e) as being anticipated by Meyers (US 2002/0038014 A1).

Meyers teaches novel asparaginases, 26443 and 4697 polypeptides, which hydrolyze asparagines to aspartic acid and ammonia (page 4, paragraph 0044) and serve as “therapeutic agents for controlling one or more of cellular proliferative and/or differentiative disorders” (page 4, paragraph 0046). Furthermore, 26443 and 4697 polypeptides and nucleic acids may be incorporated into pharmaceutical compositions wherein routes of administration include transdermal (topical) application (page 29, paragraph 0333). Additionally, the pharmaceutical compositions may include “citrates or phosphates and agents for the adjustment of tonicity” and agents for pH adjustment (page 29, paragraph 0333). These additional agents serve as enzyme activators, according to page 11, paragraph 0048 of the application under examination. Thus, Meyers teaches the application to the skin of a hydrolase polypeptide having amidase activity and its activator, meeting limitations of instant parent claims 27 and 32.

Additionally, Meyers teaches limitations in instant claims 1 (topically applicable cosmetic/dermatological composition, page 30, paragraph 0338), 7 (natural origin, page 13, paragraph 0152), 8 (recombinant polypeptide, page 15, paragraph 0173), and 16 (desquamating agent ethylenediaminetetraacetic acid {EDTA}, page 29, paragraph 0333).

Although the reference does not specifically teach that the application of the composition is for promoting desquamation of the skin, promoting hydration of the skin, promoting cell renewal in the skin, promoting cell proliferation in the skin, promoting cell differentiation, facilitating the penetration into the skin of a cosmetic/dermatological active agent (claim 28), combating bacterial adhesion to the skin (claim 29), treating xerosis (claim 24), or promoting cicatrization (claim 25), the compositions are the same and are topically administered, thus the claimed function must be inherent to the reference composition. Thus, claims 24, 25, 27, 28, 29, and 32 are anticipated by the reference.

Applicant's arguments filed October 6, 2005, have been fully considered but they are not persuasive. Applicant points to paragraph [0053] to show that the asparaginase is used to inhibit cell proliferation, contrary to recitations in claims 27 and 32. However, it is respectfully pointed out that paragraph [0053] states that the asparaginase is used only to lead to death of the malignant cells, and not of all tissue cells. Therefore, asparaginase is used only to inhibit malignant cell proliferation, which does not speak to its effects on normal tissue cells. Therefore, Meyers does not teach away from the claimed invention as the effects disclosed in the Meyers publication is not contrary to the uses recited in the instant claims. As discussed above, since Meyers teaches the application of the same composition as claimed, the new functions recited in the claims (promoting desquamation, etc.) are inherently present in the prior art.

Additionally, the applicant asserts that Meyers refers to treatment of cancers remote from the treatment of disorders of the skin, and therefore, the art does not suggest true topical application, but rather systemic drug delivery via various forms of administration, including transdermal administrations. On the contrary, Meyers states “transdermal (topical)” administration in paragraph [0333], and further provides that “for transdermal administration, the active compounds are formulated into ointments, salves, gels, or creams as generally know in the art” (paragraph [0338]). Thus, a true topical application of the polypeptide is taught by the art.

Thus, a holding of anticipation is required.

Claims 1-3, 7, 8, 16, 24, 25, 27-29, 32-36, and 39-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Rudolph-Owen et al. (WO 03/038113).

Rudolph-Owen et al. teaches the 25943 polypeptide, a glycosylasparaginase which is also known as aspartylglucosaminidase (AGA) (page 18, lines 14-20). Thus, the 25943 polypeptide is the polypeptide AGA recited in instant claims 33-42. The 25943 polypeptide serves to modulate “cellular proliferation, growth, ..., differentiation, and/or migration” (page 20, lines 18-24). Furthermore, “25943 modulators identified according to the methods of the invention can be used to modulate cellular proliferation” (page 19, lines 10-11), and “can increase cellular proliferation by increasing 25943 activity in a subject” (page 19, lines 17-18). Moreover, the 25943 modulator or the 25943 protein may be administered to a subject in order to treat cellular proliferation disorder (page 44, lines 18-24). The incorporation of 25943 modulators or the 25943 protein in pharmaceutical compositions is disclosed (page 44, line 33 through page 45, line 22). In such as case, transdermal (topical) application is disclosed as a route of

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administration (page 45, line 13). Finally, “citrates or phosphates and agents for the adjustment of tonicity”, as well as acids or bases for pH adjustment may be included in the pharmaceutical composition (page 45, lines 19-21). These additional agents serve as enzyme activators, according to page 11, paragraph 0048 of the application under examination.

Additionally, Rudolph-Owen et al. teaches limitations recited in instant claims 1 (topically applicable cosmetic/dermatological composition, page 47, lines 6-7), 3 (page 66, line 29 through page 67, line 4), 7 (natural origin, page 66, lines 31-33), 8 (recombinant polypeptide, page 66, lines 33-34), and 16 (desquamating agent ethylenediaminetetraacetic acid {EDTA}, page 45, line 18).

Although the reference does not specifically teach that the application of the composition is for promoting desquamation of the skin, promoting hydration of the skin, promoting cell renewal in the skin, promoting cell proliferation in the skin, promoting cell differentiation, facilitating the penetration into the skin of a cosmetic/dermatological active agent (claim 28), combating bacterial adhesion to the skin (claim 29), treating xerosis (claim 24), or promoting cicatrization (claim 25), the compositions are the same and are topically administered, thus the claimed function must be inherent to the reference composition. Thus, claims 32 and 34 are anticipated by the reference.

Applicant's arguments filed October 6, 2005, have been fully considered but they are not persuasive. Applicant points out that Rudolph-Owen et al. teaches inhibitors of glycosylasparaginases for inhibiting cellular proliferation and tumoregenesis. While Rudolph-Owen et al. indeed teaches this embodiment, activators of glycosylasparaginase 25943 (page 19,

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lines 17-19) and the administration of the 25943 proteins (page 44, lines 18-24) are also disclosed, thus anticipating claims 32 and 34.

Additionally, the applicant asserts that Rudolph-Owens et al. refers to treatment of cancers remote from the treatment of disorders of the skin, and therefore, the art does not suggest true topical application, but rather systemic drug delivery via various forms of administration, including transdermal administrations. On the contrary, Rudolph-Owens et al. states “transdermal (topical)” administration on page 45, line 13, and further specifies that “for transdermal administration, the active compounds are formulated into ointments, salves, gels, or creams as generally known in the art” (page 47, lines 6-7). Thus, a true topical application of the polypeptide is taught by the art.

With respect to the effects of 25943 activator on the skin, as discussed above, since Rudolph-Owens et al. teaches the application of the same composition as claimed, the new functions recited in the claims (promoting desquamation, etc.) are inherently present in the prior art.

Thus, a holding of anticipation is required.

Claim 32 is rejected under 35 U.S.C. 102(b) as being anticipated by van de Sandt et al. (In Vitro Cellular & Developmental Biology: Animal, 1995, 31(10): 761-766).

Van de Sandt et al. discloses the application of sodium dodecyl sulfate (SDS) on human skin. Their study demonstrated that certain concentrations of SDS cause increased cell proliferation. According to paragraph 0050 of the application under examination, SDS is an

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activator of a hydrolase polypeptide having amidase activity, and thus would also be considered to be an activator of aspartylglucosaminidase (AGA).

Although the reference does not specifically teach that the application of the composition is for promoting desquamation of the skin, promoting hydration of the skin, or promoting cell renewal in the skin, the compositions are the same and are topically administered, thus the claimed function must be inherent to the reference composition. Thus, claims 32 and 34 are anticipated by the reference.

A holding of anticipation is clearly required.

Claim 32 is rejected under 35 U.S.C. 102(b) as being anticipated by Martinez (FR 2,357,246, with DERWENT English abstract).

Martinez teaches a composition for topical administration comprising a hydrolase, such as an amidase (see DERWENT abstract). Although the reference does not specifically teach that the application of the composition is for promoting desquamation of the skin, promoting hydration of the skin, or promoting cell renewal in the skin, the compositions are the same and are topically administered, thus the claimed function must be inherent to the reference composition. Thus, claim 32 is anticipated by Martinez.

A holding of anticipation is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 1-11, 13, 14, 16, 17, 21, 24, 25, 27-29, and 32-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudolph-Owen et al. in view of Dalko et al. (US 2003/0113284), Collin et al. (US 5,667,789), and Herschler et al. (US 3,551,554).

As discussed above Rudolph-Owen et al. anticipates claims 1-3, 7, 8, 16, 24, 25, 27-29, 32-36, and 39-42.

However, Rudolph-Owen et al. does not expressly disclose topically applying their invention along with alpha-hydroxy acid or the agents recited in instant claim 21.

Dalko et al. discloses a composition for application on the skin for various purposes, including the prevention/treatment of cutaneous signs of ageing and drying of the skin (abstract). The composition may comprise various agents, including a moisturizing agent, a propigmenting agent, an agent which stimulates the synthesis of dermal or epidermal macromolecules and/or prevents their decomposition, an agent which stimulates the proliferation or differentiation of

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keratinocytes, a muscle relaxant (serves as a relaxing agent), and an agent for combating pollution or free radicals (claim 24). Additionally, the composition may comprise of a UV screening agent (claim 25).

Collin et al. discloses cosmetic and/or dermatological emulsions (column 1, lines 7-10). The emulsions may comprise cicatrizing agents (column 5, lines 6-7) and alpha-hydroxy acids (column 5, lines 9-10). The emulsions are used for various purposes, including prevent/combating ageing and/or pigmentation of the skin (column 5, lines 34-37).

Herschler et al. discloses compositions comprising DMSO for enhancing penetration of agents through the skin (abstract).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have included the agents disclosed in Dalko et al., Collin et al., and Herschler et al. in the composition disclosed in Rudolph-Owen et al. for topical application. One of ordinary skill in the art would have been motivated to do this since the agents disclosed in these references are appropriate for compositions applied to the skin for the treatment of skin conditions. The artisan would have recognized the suitability of including these agents in a composition for application to the skin. With respect to DMSO, one would have been motivated to have included this agent in order to enhance the effect of the 25943 polypeptide on the skin. In sum, with the inclusion of the above agents, claims 17, 21, 37, and 38 are rendered obvious by the references.

Rudolph-Owen et al. differs from the claims in that it does not teach that the hydrolase polypeptide (25943 polypeptide) is isolated and purified from the stratum corneum of human epidermis with the molecular masses specified in claims 4-6. Nevertheless, it would have been

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obvious to a person of ordinary skill in the art to have obtained the 25943 polypeptide from human skin cells (hence the stratum corneum of the human epidermis) since Rudolph-Owen et al. teaches a relatively high expression in human skin samples of the mRNA for the 25943 polypeptide compared to other human cell types and tissues (page 5, lines 23-28 and page 8, Table 1). The molecular weights recited in claims 4-6 are rendered obvious by the reference since the molecular weight of the 25943 polypeptide composition would have varied according to the fragment of the polypeptide used.

Finally, Rudolph-Owen et al. differs from the claims in that it does not teach the concentrations of the agents delivered as recited in claims 9-11, 13, and 14. However, it is noted that Rudolph-Owen et al. states, in reference to the dosage of the 25943 polypeptide, that “the skilled artisan will appreciate that certain factors may influence the dosage required to effectively treat a subject...” (page 48, lines 22-23). Therefore, the selection of specific concentrations of the hydrolase polypeptide and activator of said hydrolase polypeptide would have been a routine matter of optimizing result-effective parameters at the time of the applicant’s invention. Thus, claims 9-11, 13, and 14 are rendered obvious.

A holding of obviousness is clearly required.

Claims 1, 7-11, 13, 14, 16, 17, 24, 25, 27-29, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyers in view of Dalko et al., Collin et al., and Herschler et al.

As discussed above, Meyers anticipates claims 1, 7, 8, 16, 24, 25, 27-29, and 32.

However, Meyers does not expressly disclose topically applying their invention along with alpha-hydroxy acid or the agents recited in instant claim 21.

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Dalko et al. discloses a composition for application on the skin for various purposes, including the prevention/treatment of cutaneous signs of ageing and drying of the skin (abstract). The composition may comprise various agents, including a moisturizing agent, a propigmenting agent, an agent which stimulates the synthesis of dermal or epidermal macromolecules and/or prevents their decomposition, an agent which stimulates the proliferation or differentiation of keratinocytes, a muscle relaxant (serves as a relaxing agent), and an agent for combating pollution or free radicals (claim 24). Additionally, the composition may comprise of a UV screening agent (claim 25).

Collin et al. discloses cosmetic and/or dermatological emulsions (column 1, lines 7-10). The emulsions may comprise cicatrizing agents (column 5, lines 6-7) and alpha-hydroxy acids (column 5, lines 9-10). The emulsions are used for various purposes, including prevent/combating ageing and/or pigmentation of the skin (column 5, lines 34-37).

Herschler et al. discloses compositions comprising DMSO for enhancing penetration of agents through the skin (abstract).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have included the agents disclosed in Dalko et al., Collin et al., and Herschler et al. in the composition disclosed in Meyers for topical application. One of ordinary skill in the art would have been motivated to do this since the agents disclosed in these references are appropriate for compositions applied to the skin for the treatment of skin conditions. The artisan would have recognized the suitability of including these agents in a composition for application to the skin. With respect to DMSO, one would have been motivated to have included this agent

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in order to enhance the effect of the asparaginases on the skin. In sum, with the inclusion of the above agents, claims 17 and 21 are rendered obvious by the references.

Finally, Meyers differs from the claims in that it does not teach delivering the concentrations of the agents as recited in claims 9-11, 13, and 14. However, the selection of specific concentrations of the hydrolase polypeptide and activator of said hydrolase polypeptide would have been a routine matter of optimizing result-effective parameters at the time of the applicant's invention. The effects of the topical application of the agents on the skin is dependent on the concentrations of the agents. Thus, claims 9-11, 13, and 14 are rendered obvious.

A holding of obviousness is clearly required.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan E. Fernandez whose telephone number is (571) 272-3444. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

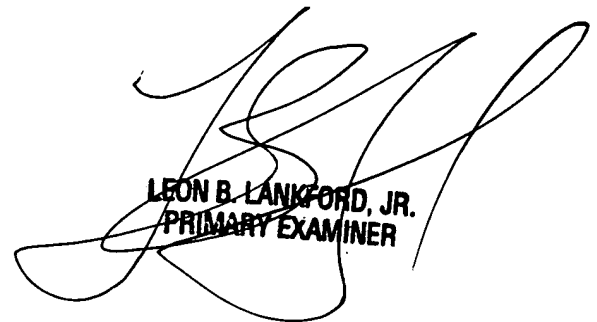
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on (571) 272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Susan E. Fernandez
Assistant Examiner
Art Unit 1651

sef



LEON B. LANKFORD, JR.
PRIMARY EXAMINER